

# Welcome

Office for State, Tribal, Local and Territorial Support  
presents

## *CDC Vital Signs* Town Hall **Safe Sleep for Babies**

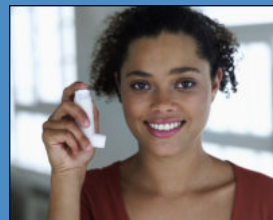
January 16, 2018  
2:00–3:00 PM (ET)

# Agenda

Time	Agenda Item	Speaker(s)
2:00 pm	Welcome & Introduction	<b>Steven L. Reynolds, MPH</b> Deputy Director, Office for State, Tribal, Local and Territorial Support
2:05 pm	Vital Signs Overview	<b>Jennifer Bombard, MSPH</b> Epidemiologist, Division of Reproductive Health, National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention
2:15 pm	Presentations	<b>Sunah Hwang MD, MPH</b> Assistant Professor of Pediatrics, University of Colorado School of Medicine  <b>Rachel Heitmann, MS</b> Section Chief for Injury Prevention and Detection, Tennessee Department of Health
2:35 pm	Q&A and Discussion	<b>Steven L. Reynolds, MPH</b>
2:55 pm	Wrap-up	
3:00 pm	End of Call	



to support STLT efforts and build  
momentum around the monthly  
release of CDC *Vital Signs*



# Promoting Safe Sleep Practices to Reduce the Risk of Infant Sleep-Related Deaths



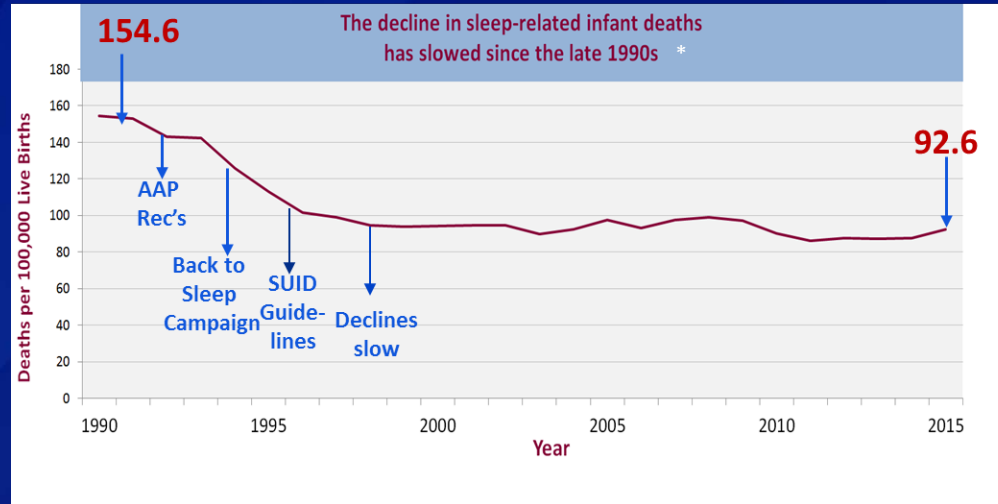
**Jennifer Bombard, MSPH**  
Epidemiologist  
Division of Reproductive Health  
January 16, 2017

## Objectives

- ❑ Explain the importance of promoting safe sleep practices and current American Academy of Pediatrics (AAP) recommendations
- ❑ Describe state-level trends and disparities in infant safe sleep practices
- ❑ Share what states and healthcare providers can do

# Sleep-Related Infant Deaths

- ❑ 3,500 infants continue to die annually from sleep-related deaths



\*SOURCE: CDC/NCHS, National Vital Statistics System, 1999-2015. Cause of death defined according to the International Classification of Diseases, Ninth Revision (ICD-9) for 1984-1998, and the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10). "Sleep-related deaths" or Sudden Unexpected Infant Death (SUID) includes cause of death ICD-9 and ICD-10 codes: Accidental Suffocation or Strangulation in Bed (ASSB) (E913.0; W75), Sudden Infant Death Syndrome (SIDS) (798.0; R95), and unknown cause, (799.9; R99).

## American Academy of Pediatrics

### Recommendations for a Safe Sleep Environment

- ❑ Place infant on back (supine) at all sleep times
- ❑ Place infant on firm sleep surface, such as a mattress in a safety-approved crib or bassinet
- ❑ Avoid use of soft bedding (e.g., blankets, pillows, soft objects) in the infant sleep environment
- ❑ Infant and caregivers can room-share, but not bed-share

### Additional Recommendations to Reduce the Risk for Sleep-Related Infant Deaths

- ❑ Avoid exposure to smoke, alcohol, illicit drugs
- ❑ Breastfeed
- ❑ Provide routinely recommended immunizations

# ***Vital Signs MMWR: Trends and Disparities in Infant Safe Sleep Practices, Pregnancy Risk Assessment Monitoring System (PRAMS), 2009-2015***

## **Research Questions:**

- ❑ **What was the prevalence of unsafe infant sleep practices by state and select maternal characteristics in 2015?**
  - ❑ Non-supine sleep positioning (on stomach; on side)
  - ❑ Bed-sharing
  - ❑ Use of soft bedding (bumper pads; thick blankets; positioner; pillows; stuffed toys)
  
- ❑ **Has the prevalence of non-supine sleep positioning changed over time (2009-2015)?**

## Methods

### ❑ Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

- ❑ Collects population-based data from women with a live birth 2 to 6 months after delivery about their attitudes/experiences before, during, after pregnancy
- ❑ Self report survey linked to birth certificate data
- ❑ Response rate:  $\geq 65\%$  (2009-11),  $\geq 60\%$  (2012-14),  $\geq 55\%$  (2015)

### ❑ Questions on Infant Sleep Practices

#### All States:

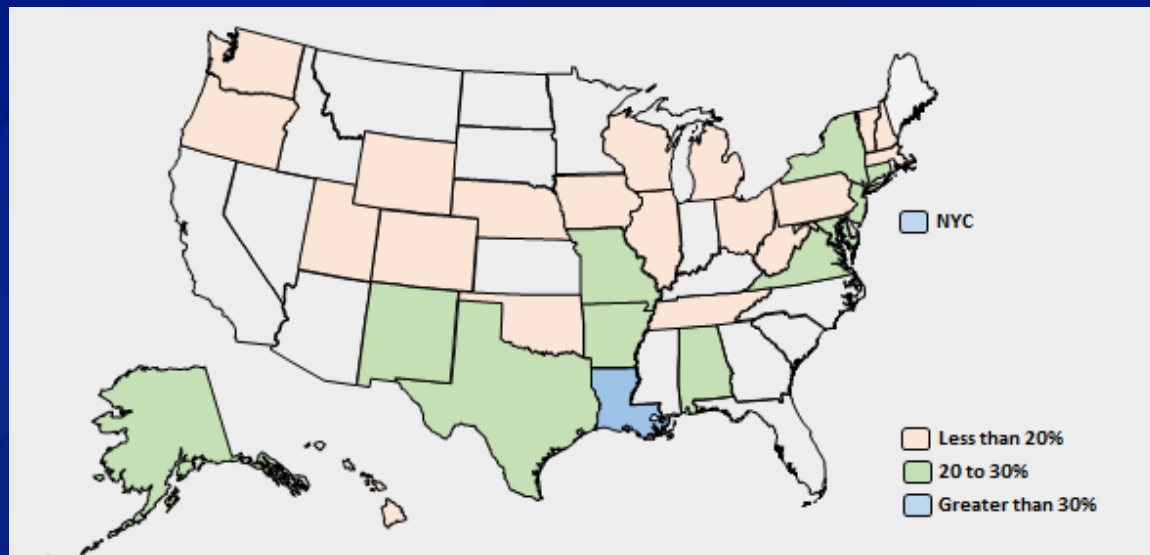
- ❑ In which position do you most often lay your baby down to sleep now? (*on side, on back, on stomach*)

#### Select States:

- ❑ How often does your new baby sleep in the same bed with you or anyone else? (*always, often, sometimes, rarely, never*)
- ❑ Listed below are some things that describe how your new baby usually sleeps; T/F? (*pillows, thick or plush blankets, bumper pads, stuffed toys, infant positioner*)

## Results

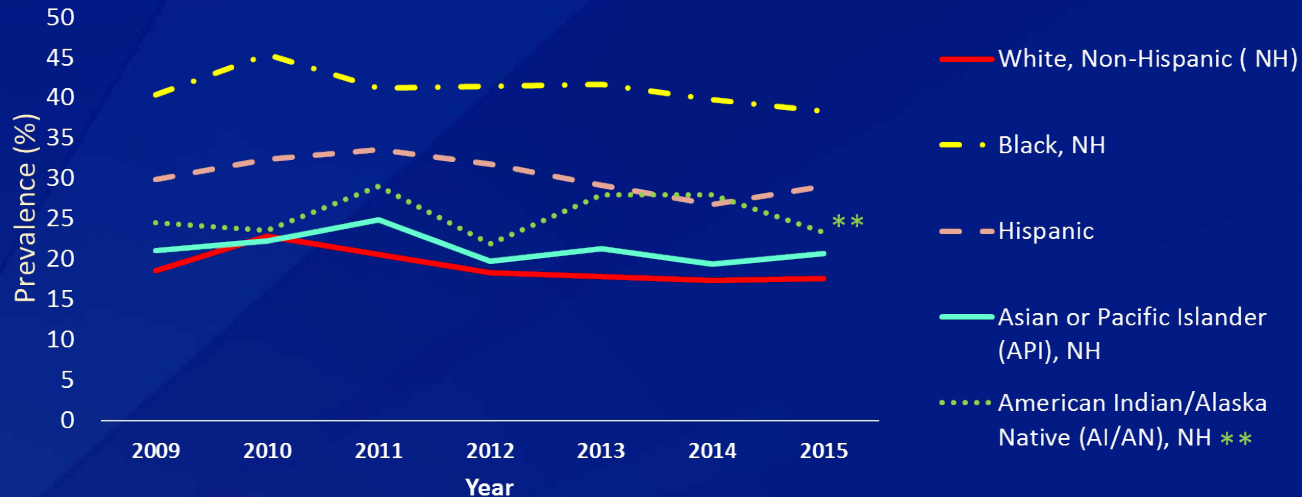
## Percentage of Mothers Who Report Non-Supine Sleep Positioning in 32 States\* and New York City (NYC), PRAMS, 2015



\*32 states include: AL, AK, AR, CO, CT, DE, HI, IL, IA, LA, MD, MA, MI, MO, NE, NH, NJ, NM, NY, OH, OK, OR, PA, TN, TX, UT, VT, VA, WA, WV, WI, WY

## Results (cont.)

### Trends over Time in Non-Supine Sleep Positioning, by Race/Ethnicity – 15 States,\* PRAMS 2009-2015

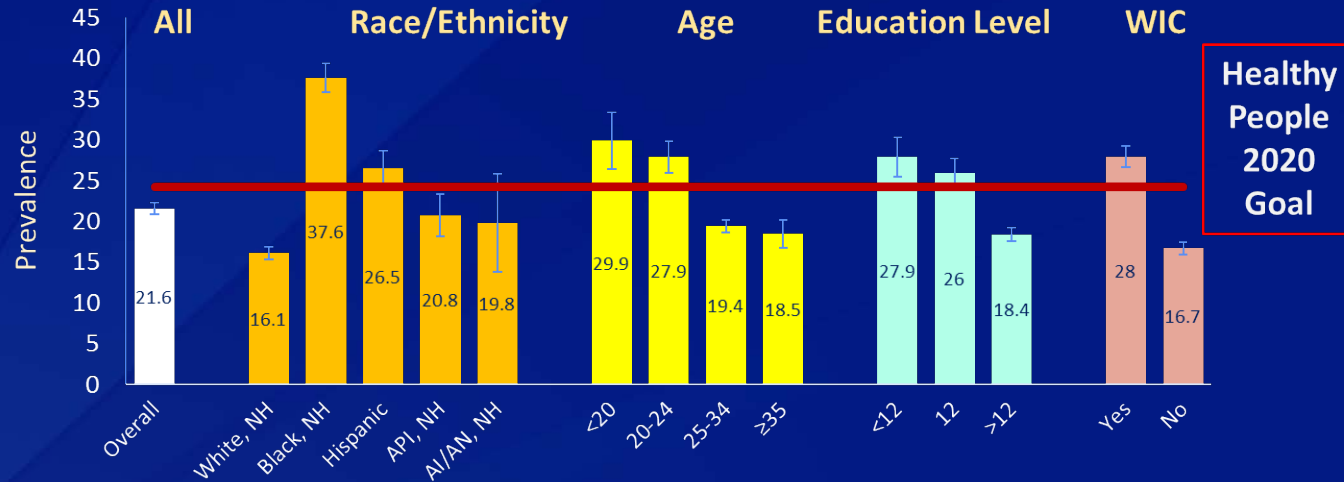


\*15 states include: DE, HI, IL, MD, MA, MO, NE, NJ, OK, PA, UT, VT, WA, WV, WY

\*\* No significant decline over time

## Results (cont.)

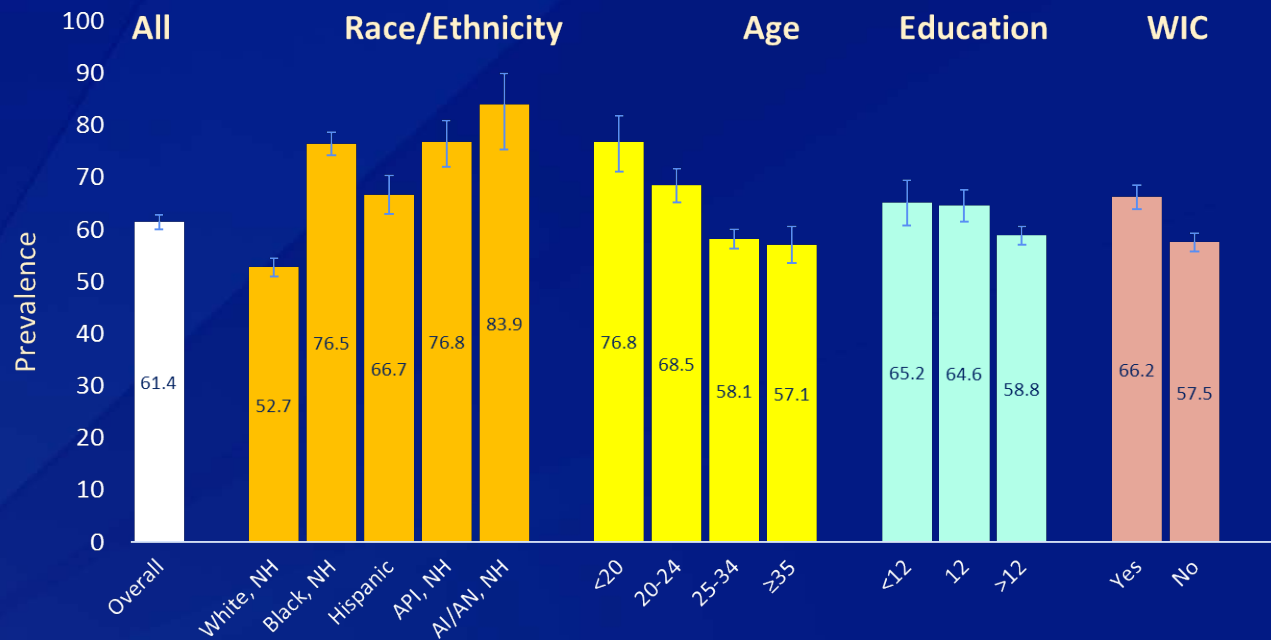
### Prevalence of Non-Supine Sleep Positioning by Maternal Characteristics, 32 States\* and NYC, PRAMS 2015



\*32 states include: AL, AK, AR, CO, CT, DE, HI, IL, IA, LA, MD, MA, MI, MO, NE, NH, NJ, NM, NY, OH, OK, OR, PA, TN, TX, UT, VT, VA, WA, WV, WI, WY

## Results (cont.)

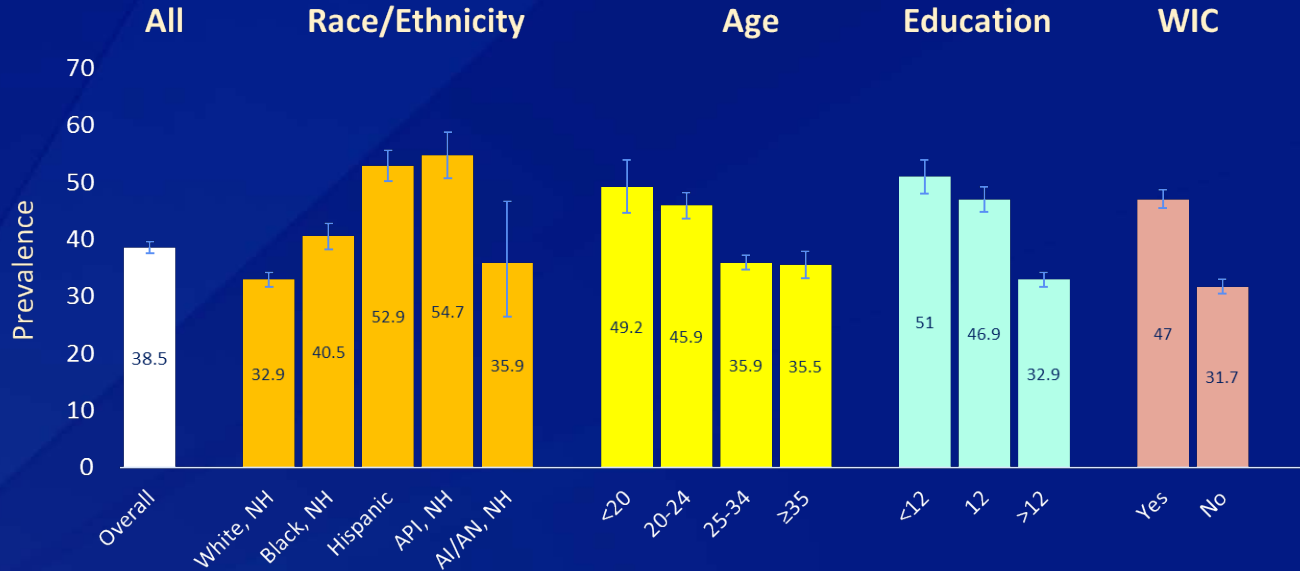
Prevalence of Bed Sharing by Maternal Characteristics, 14 States,\* PRAMS, 2015



\*14 states include: AK, CT, DE, LA, NE, NJ, PA, TN, TX, VT, VA, WA, WV, WI

## Results (cont.)

Prevalence of Soft Bedding Use by Maternal Characteristics, 13 States\* and NYC, PRAMS, 2015



\*13 states include: AK, IL, IA, LA, MD, MI, MO, NJ, NY, PA, TN, WV, WY

## Conclusions

- ❑ About 1-in-5 mothers report non-supine sleep position, over half bed-share, and more than a third report soft bedding use
- ❑ Unsafe sleep practices varied by state, race/ethnicity, age, education, and participation in WIC

## Limitations

- ❑ Limited to states that implement PRAMS, met required response rate threshold, included optional infant sleep practice questions
- ❑ PRAMS questions capture bed-sharing only, starting in 2016 – PRAMS questions also include room-sharing to better align with measuring AAP recommendations
- ❑ Maternal responses may be subject to recall and social desirability bias

## States Can:

- ❑ Use PRAMS and Sudden Unexpected Infant Death (SUID) Case Registry data to help develop, inform, and evaluate safe-sleep prevention practices.
- ❑ Explore opportunities with state and national partnership initiatives using evidence-based metrics:
  - Safe Sleep Collaborative Improvement and Innovation Network (CoIIN) to Reduce Infant Mortality
  - National Action Partnership to Promote Safe Sleep Improvement and Innovation Network (NAPPSS-IIN)

## Healthcare Providers Can:

- ❑ **Ask caregivers how they place infant to sleep, identify challenges in following recommendations, and assist with finding solutions**
- ❑ **Advise caregivers to follow AAP recommendations on safe sleep practices**
  - Mothers who received correct advice from their healthcare provider were less likely to place their infant to sleep on their stomach or side (OR: .5, 95% CI: .36-.67)\*
- ❑ **Model safe sleep practices for caregivers**

## Healthcare Provider Interventions

- ❑ **Following presentations present their findings on hospital based interventions**

\* Colson et al., Factors associated with choice of infant sleep position. Pediatrics 2017.



## Vital Signs MMWR Team

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Web: <http://www.cdc.gov>

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

# **Massachusetts NICU Safe Sleep Collaborative**

Susan S. Hwang, MD MPH  
CDC Vital Signs Town Hall  
January 16, 2018

# SIDS: Triple Risk Model

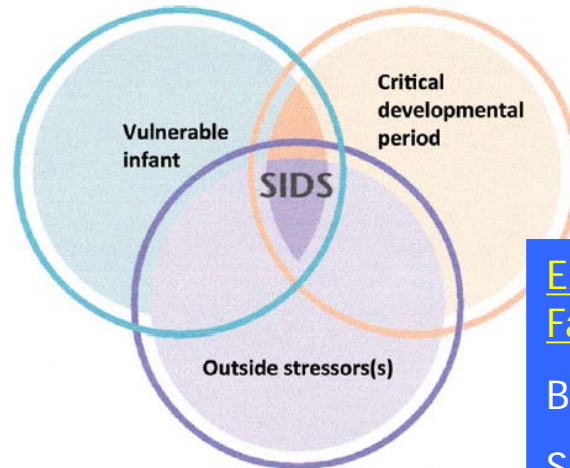
## Intrinsic Factors

Prenatal exposures

Medullary serotonin system

Genetic background

Prematurity, IUGR



## Extrinsic/Modifiable Risk Factors

Breastfeeding

Smoking

Temperature regulation

Sleep practices

# MA SUID Cases, 2012-2014

Birth Characteristics	SUID Cases	All Births
Preterm (<37 weeks)	26.7%	8.9%
Low Birth Weight (<2500 grams)	26.7%	7.5%
Maternal Age <20 years	10.0%	3.9%
Public source of prenatal care	59.2%	38.3%

Source: Registry of Vital Statistics, MDPH.

\*SUID includes: SIDS, unintentional suffocation in bed, and undetermined causes

# Safe Sleep Guidelines

American Academy  
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

FROM THE AMERICAN ACADEMY OF PEDIATRICS

TECHNICAL REPORT

## SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment





# Local Improvement Effort: Safe Sleep in the NICU

South Shore Hospital and  
St. Elizabeth's Medical Center

# Implementation of Safe Sleep Practices in the NICU

## AIMS:

- To increase the percentage of eligible infants engaging in safe sleep practices in the NICU.
- To increase the percentage of infants discharged from the NICU who engage in safe sleep practices at home.
- To increase NICU staff awareness about safe sleep practices and SIDS.

# Project Components: Intervention

- Nursing education
- In-person presentation, bedside teaching
- On-line module: Continuing education program on SIDS risk reduction NICHD  
<http://www.nichd.nih.gov/SIDS/pages/sidsnursesce.aspx>
- Nursing and physician designation and documentation of sleep position

### Infant Therapeutic Positioning

- While your infant is hospitalized, he/she may be placed in positions other than the American Academy of Pediatrics "Back to Sleep" Guidelines because of medical reasons. Sleep positions may include:
  - Stomach
  - Side-lying
  - Elevated head of bed
- Developmental positioning aids and/or blanket rolls may also be used for medical purposes.

*\*Therapeutic positioning is NOT recommended or safe for your infant at home\**

*\*Your infant will be introduced to Safe Sleep Practices when it is medically appropriate\**

### "Safe to Sleep" Practices

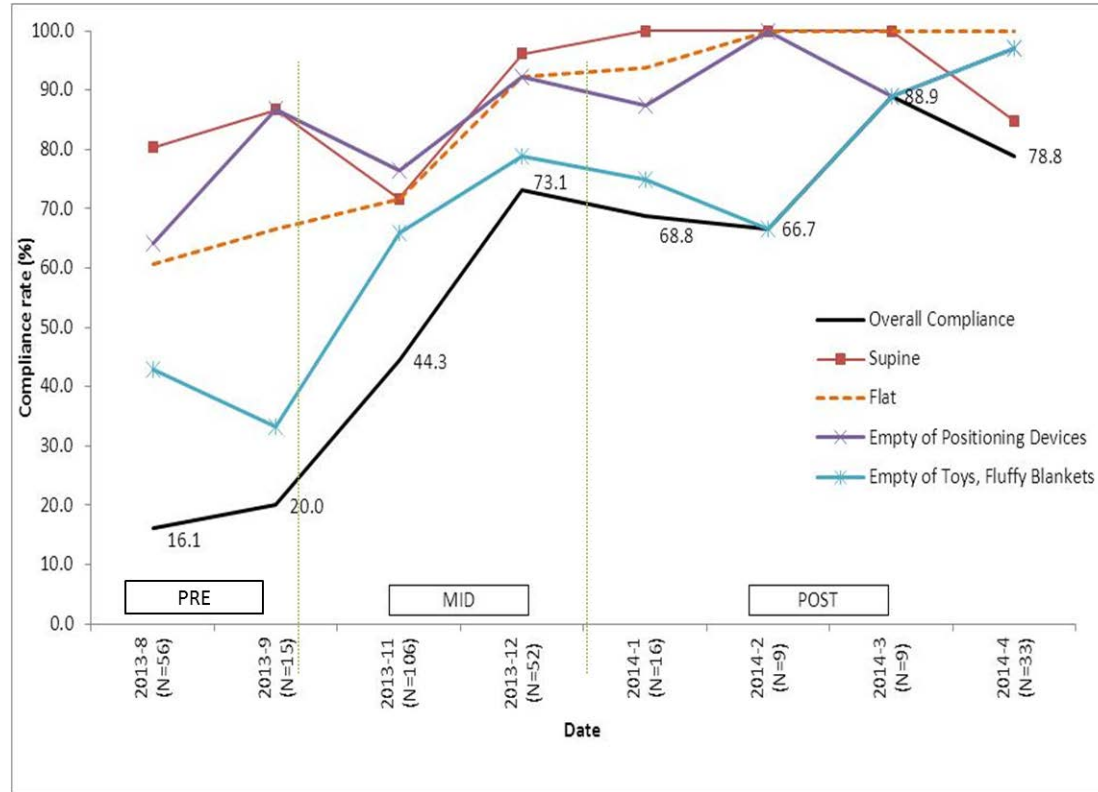
The American Academy of Pediatrics Safe Sleep Practices include:

- Back to Sleep
- Use a firm flat mattress in a crib or bassinet
- No sleeping in carseats, swings, or other positioning devices
- No loose bedding, blankets or soft objects in crib
- No bumpers, pillows, or stuffed toys in the crib
- Do not over heat infants
- No co-sleeping in bed, sofa, or other areas

*\*For more information from the American Academy of Pediatrics on how parents can create a safe sleep environment for their infants, please read the provided pamphlet and attend the NICU/SCN Discharge Class.\**

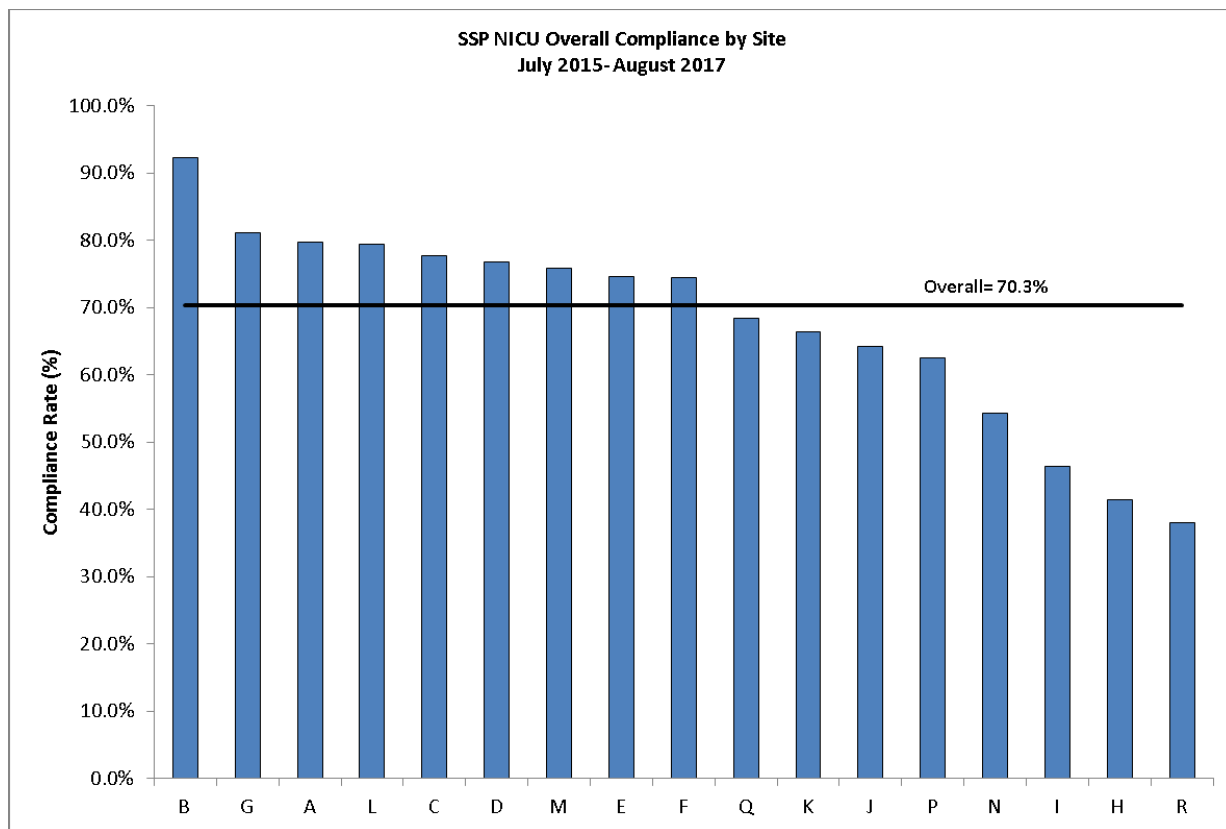
Hwang SS, O'Sullivan A, Fitzgerald E, Melvin P.  
JPerinatol 2015

# Results



Hwang, Sullivan, Fitzgerald, Melvin et al.  
J Perinatology 2015.

# Expansion to and Comparison Across MA Units



# Post-Discharge Monitoring of NICU Infants

- Collaboration with Massachusetts Dept of Public Health Welcome Family Program
- Post-discharge survey about safe sleep practices and breastfeeding
  - Outpatient settings: primary care and infant follow up clinics
  - Email and text surveys to NICU parents

# Acknowledgements

- Hospital safe sleep teams
- MA DPH
- March of Dimes
- Collaborative leadership
  - Hafsatou Diop
  - Munish Gupta
  - Susan Hwang
  - Patrice Melvin
  - Peggy Settle

# THANK YOU FOR YOUR ATTENTION!



# INNOVATIVE SAFE SLEEP INITIATIVES IN TENNESSEE

Rachel Heitmann, MS  
Section Chief, Injury Prevention and Detection



# Objectives

- Describe overall safe sleep implementation and evaluation efforts in Tennessee
- Explain the new interactive safe sleep WIC educational module
- Discuss retail partnerships
- Describe hospital based safe sleep efforts
- Describe housing development training

# Tennessee Safe Sleep Campaign

**Safe Sleep For Your Baby**

**Keeping Your Baby Safe While Sleeping**

An Educational Flip Chart For Use by Healthcare Providers

Developed by the:

**TN** Department of Health

**ABC Safe Sleep for Me**

**Safe Sleep For Your Baby**

**Remember the ABC's of Safe Sleep:**  
Babies should sleep **Alone**, on their **Back**, and in a **Crib**.

Tennessee Department of Health  
safesleep.tn.gov

**Safe Sleep For Your Baby**

**Did You Know?**

Every year, many Tennessee babies die from sleep-related causes. Most of these deaths are preventable.

**The following guidelines to prevent sleep-related deaths are recommended by the American Academy of Pediatrics:**

- Always place babies on their backs to sleep or naps and at nap time. Babies who sleep on their backs are less likely to die of Sudden Infant Death Syndrome (SIDS).
- Babies should always sleep in a crib. The safest place for a baby is in the same room as the parents but, alone in a separate sleep area.
- Keep babies' cribs, cribs, and bassinets out of the baby's sleeping area. Do not use pillows and blankets in a baby's sleeping area. A baby should sleep in a crib with only a light fitting sheet.
- Avoid heating and baby overheat during the night. A baby should be dressed lightly for sleep. Set the room temperature to a range that is comfortable for a lightly clothed adult.
- Do not use crib bumpers. These do not reduce injuries and can cause suffocation.
- Avoid smoking. Both maternal smoking during pregnancy and secondhand smoke after birth should be avoided.
- Breastfeeding is recommended for at least the first six months of life. Breastfeeding is associated with a reduced risk of SIDS.

**Remember the ABC's of Safe Sleep:**  
Babies should sleep **Alone**, on their **Back**, and in a **Crib**.

Tennessee Department of Health  
safesleep.tn.gov

**Safe Sleep For Your Baby**

- ☐ Do Not Smoke
- ☐ No Toys in Crib
- ☐ Put Baby to Sleep in Crib
- ☐ Put Baby on Back to Sleep
- ☐ No Bumper Pads or Pillows in Crib
- ☐ Use a Tight Fitting Sheet
- ☐ Do Not Overheat or Overdress
- ☐ Baby Should Sleep on a Firm Mattress

**Remember the ABC's of Safe Sleep:**  
Babies should sleep **Alone**, on their **Back**, and in a **Crib**.

Tennessee Department of Health  
safesleep.tn.gov

**Cribs for Kids**  
Helping every baby sleep safer

Do you need a safe sleep environment for your baby? Find a local resource at: [Cribsforkids.org/find-a-chapter](http://Cribsforkids.org/find-a-chapter)

**Tennessee Breastfeeding Hotline**  
855-4BFMOMS

Have questions about breastfeeding or need support? Call 855-4BFMOMS

**Tennessee Tobacco Quitline**  
1-800-QUIT-NOW  
1-800-784-8669

Do you need help to quit smoking? Call the Tennessee Tobacco Quitline at 1-800-784-8669

**Health Care.gov**

Do you need health insurance? Please visit [Healthcare.gov](http://Healthcare.gov) to sign up for TennCare or call 1-800-318-2596

**POISON Help**  
1-800-222-1222

Tennessee Poison Center provides advice for poison emergencies. Call 1-800-222-1222

**Tennessee Parent Helpline**

The Parent Helpline is available 24/7 to support parents and caregivers with any questions. Call 1-800-CHILDREN

**kidcentral tn**  
KIDCENTRALTN.COM

For more information on infant and child health resources go to: [kidcentraltn.com](http://kidcentraltn.com)

# WIC Educational Module

- Easy, fun and convenient lessons tailored to the learner.
- Utilizes the stages of change to assess and provide appropriate education to the learner.

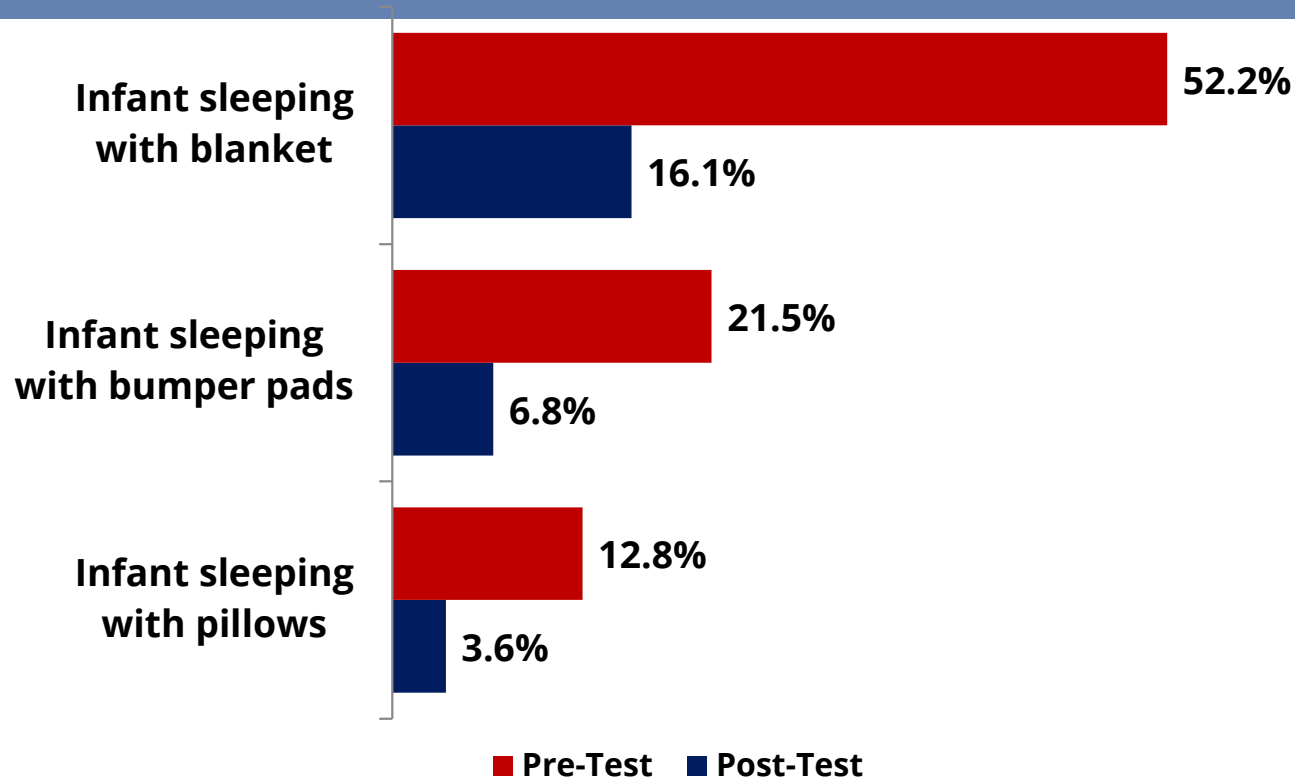
**Available at WIC online nutrition education at [wichealth.org](http://wichealth.org)**



# WIC Online Education Safe Sleep Data

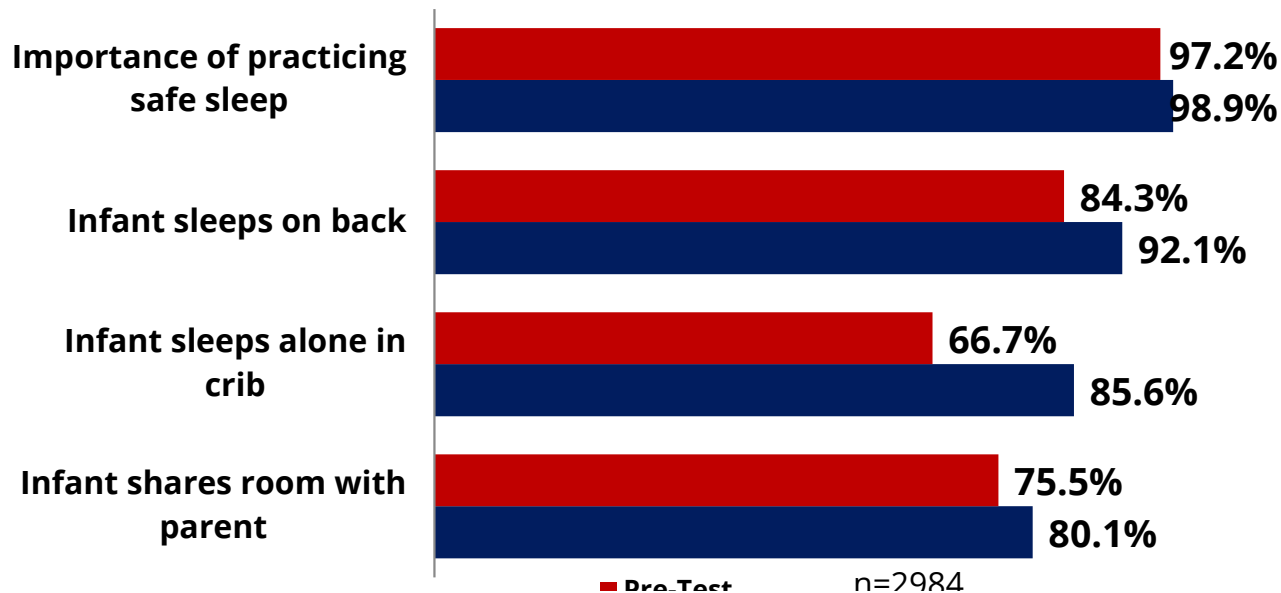
- Pre-Test: Assesses current safe sleep practices
  - Crib environment, pillows, bumper pads, blankets
  - Where and how their infant sleeps
  - Confidence in current safe sleep practices
- Post Test: Assesses intent to practice safe sleep after educational intervention
  - Measures intent to change from current practices
  - Write one lesson learned

# Safe Sleep Actions and Intent



n=2616

# Safe Sleep Practices



# Retail Partnerships



Floor Talker

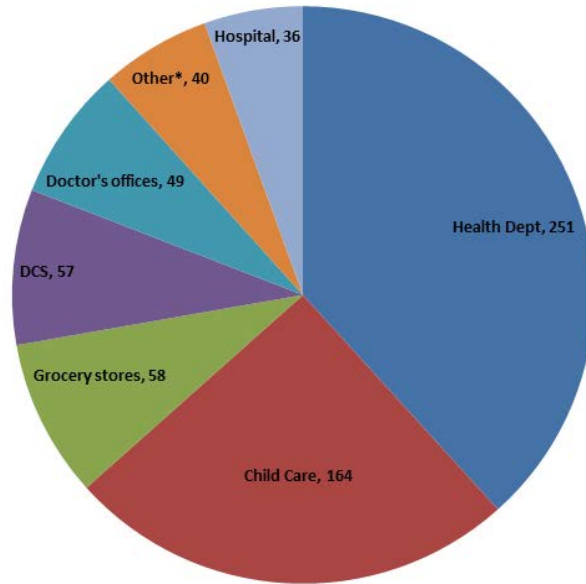
- Dollar General utilized TDH materials to create a “shelf talker” to place on store shelves
- Other stores have placed the safe sleep floor talker in baby aisles – (Walmart, Kroger, CVS pharmacy and other independent retailers)
- Expanded to daycare providers, pediatrician offices and other state agencies



Shelf Talker

# Safe Sleep Floor Talkers

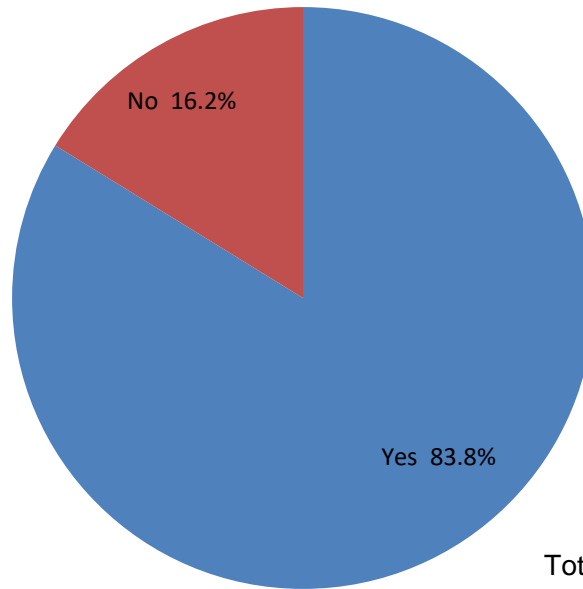
Placement of Floor Talkers



Total placed = 655

# Safe Sleep Floor Talkers

Do you believe people visiting your building notice the floor talkers?

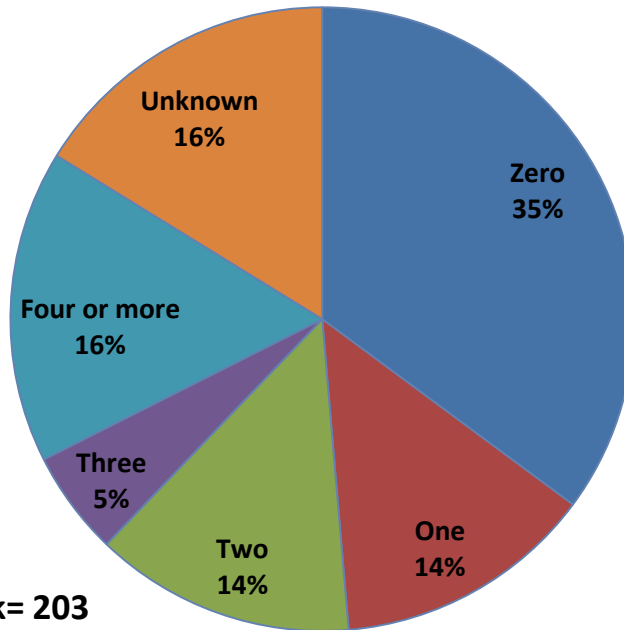


Total responses =  
37



# Safe Sleep Floor Talkers

**Number of customer comments per week**



**Total comments per week= 203**

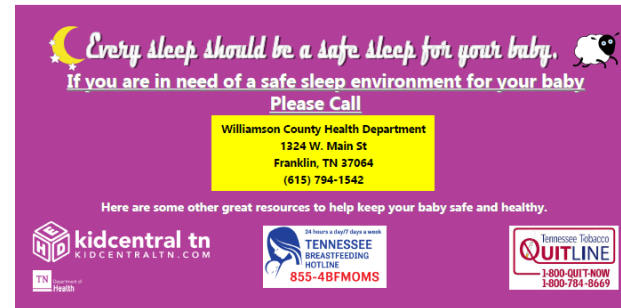
**Total responses = 37**

# Utility Company

- City of Franklin Utility Company
- Educational insert in the October monthly bill
- Includes community resources and information on how to get a portable crib



Front



Back



# Hospital-Based Efforts



- Received the Cribs for Kids national safe sleep certification with a minimum of bronze level
- Submitted the Tennessee Department of Health (TDH) annual safe sleep hospital policy report
- Minimum of 90% of cribs met the American Academy of Pediatrics (AAP) safe sleep guidelines

# Hospital-Based Efforts

## Safe Sleep Crib Card

 **Follow the ABC's of Safe Sleep**   
I should sleep **Alone**, on my **Back**, in a safe **Crib**

Name \_\_\_\_\_ Room \_\_\_\_\_

Doctor \_\_\_\_\_

Mother's Name \_\_\_\_\_

Date of Birth \_\_\_\_\_ Time \_\_\_\_\_

Female ☐ Male ☐ Weight \_\_\_\_\_ Length \_\_\_\_\_

Head \_\_\_\_\_ Chest \_\_\_\_\_ Breastfed ☐

Mother's Doctor \_\_\_\_\_ Bottled ☐

### Tips on Safe Sleep for Your Baby

**Always place your baby on their back to sleep for every sleep.**

The safest place for baby to sleep is in their own area, on a firm surface and in the same room as their caregiver.

**Do not overheat or overdress your baby during the night. If you are comfortable, so is your baby.**

**Keep loose objects, toys, bumper pads and bedding out of your baby's sleep area.**

**Breastfeeding has a protective effect and is associated with a reduced risk of SIDS.**

**Avoid smoking during pregnancy and do not smoke around your baby.**



For more information:  
Tennessee Department of Health  
[safesleep.tn.gov](http://safesleep.tn.gov)



# Housing Development Project

- Utilizes the Direct On Scene Education (DOSE) model used with first responders
- Teaches maintenance workers to recognize an unsafe sleep environment
- Provides resources to residents of housing developments to assist in obtaining a safe sleep environment

# Contact Information

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615-741-0368

# CDC Vital Signs Electronic Media Resources

- Become a fan on Facebook  
[www.facebook.com/cdc](http://www.facebook.com/cdc)
- Follow us on Twitter  
[www.twitter.com/CDCgov](http://www.twitter.com/CDCgov)
- Syndicate Vital Signs on your website  
<https://tools.cdc.gov/medialibrary/index.aspx#/media/id/305883>
- Vital Signs interactive buttons and banners  
<https://www.cdc.gov/socialmedia/tools/buttons/vitalsigns>

# Thank You

Provide feedback on this teleconference: [OSTLTSFeedback@cdc.gov](mailto:OSTLTSFeedback@cdc.gov)



Please mark your calendars for the next  
*Vital Signs* Town Hall Teleconference

**February 13, 2018**

**2:00–3:00 PM (ET)**

For more information, please contact Centers for Disease Control and Prevention.

1600 Clifton Rd, NE, Atlanta, GA 30333

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Email: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)

Web: [www.cdc.gov](http://www.cdc.gov)

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